Art Unit: 1626

DETAILED ACTION

Claims 1 to 10 are pending in the application.

Receipt is acknowledged of the amendment filed July 1, 2009, which has been entered in the file.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 to 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaser (US 5211719), of record in view of Breton et al. (US 5129948), of record.

Determination of the scope and content of the prior art (MPEP §2141.01)

Kaser discloses concentrated aqueous solutions that are similar to those claimed that are used for dyeing and printing paper and textile materials such as cellulose. The dyes used in the concentrated aqueous solutions of Kaser are the dyes of instant formula I wherein D is a radical of the formula (a); M is an unsubstituted or substituted phenyl; B is hydrogen or an

Art Unit: 1626

unsubstituted aryl radical; and n is 1. Note column 3, lines 1 to 10 and the Examples of Kaser.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

The concentrated aqueous solutions of Kaser differ from those claimed only in that a different polyglycol amine is used. Kaser uses polyglycol amines of the formula

whereas in the claimed concentrated

or

aqueous solutions, at least one polyalkeneamine of the formula

$$H_3C - O - \left\{ -\frac{R}{H_2} - \frac{R}{H} - O - \right\}_n + \frac{R}{H_2} - \frac{R}{H} - NH_2$$
 (II)

is used.

Finding of prima facie obviousness---rational and motivation (MPEP §2142-2413)

Breton et al. disclose inks for ink jet printing that contain a liquid carrier, a colorant, and may contain a primary or secondary polyalkylene amine, for example of the formula

Art Unit: 1626

H₂NCHCH₂-|OCHCH₂]₆-|OCH₂CH₂|₆-|OCH₂CH₃|₆-|NH₂ CH₃ CH₃ CH₃

of this formula are encompassed by Formula (III) of the instant claims. Note column 2, lines 25 to 49; column 4, lines 4 to 66; column 5, lines 7 to 52; and Table A in column 10. Breton et al. disclose that the addition of the primary or secondary polyoxyalkylene amine "reduces the drying time of the ink compositions while maintaining good print quality" (column 2, lines 25 to 35).

One of ordinary skill in the art would have been motivated to substitute the primary or secondary polyoxyalkene amines of Breton et al. for the polyglycol amines in the concentrated aqueous dye solutions of Kaser with the expectation that the dye qualities would be improved. It would have been obvious to one of ordinary skill in the art to combine the teachings of Kaser and Breton et al. since the dye-containing compositions of both are used to dye or print paper. The claimed concentrated aqueous dye solutions, ink jet inks, hydroxyl-containing substrate or paper and process of dyeing and/or printing would have been rendered obvious by the teachings of the references in the absence of any unobvious or unexpected property or result.

Art Unit: 1626

Response to Arguments

Applicant's arguments filed July 1, 2009 have been fully considered but they are not persuasive. Applicant states that "in Breton et al. the concern is producing an acceptable quality print with reduced drying times, while the instant invention is directed toward a long term stable concentrated solution of the claimed colorants. These are starkly different products". response to applicant's argument that the instant invention is directed toward a long term stable concentrated solution of the claimed colorants while the prior art is directed to producing an acceptable quality print with reduced drying times, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See Ex parte Obiaya, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Furthermore, Breton et al. is directed to compositions comprising a colorant and a polyoxyalkyleneamine (e.g. an ink composition). See claims 1 to 22 of Breton et al., for example. Note that Applicants' concentrated aqueous solution can be an ink composition.

Applicant also states that a prima facie case of obviousness has not been established because the prior art does not teach, disclose or suggest a concentrated aqueous solution,

Art Unit: 1626

comprising at least one of a salt or free acid of an anionic dye and at least one of the polyoxyalkyleneamines of the formula

$$H_3C-O - C - C - C - C - NH_2$$
 (II)

where n = 10 to 50 and wherein R and R' are independently H or methyl

or of the formula

where a + c = 2 to 6 and b = 2 to 40

with the proviso that the molecular weight of the polyoxyalkyleneamine (II) or polyoxyalkyleneamine (III) is less than 1000 as defined by independent claim 1.

However, Kaser discloses concentrated aqueous solutions of anionic dyes with polyglycol amines and Breton et al. teach the polyoxyalkeneamines of the instant formula III for use in dye compositions. It would have been obvious to substitute the polyoxyalkeneamine of Breton et al. for the polyglycol amines of Kaser for the reasons given above. The 103(a) rejection above is based on the combination of Kaser and Breton et al.

Art Unit: 1626

Applicants may not argue each reference separately where the rejection is based on a combination of references.

Allowable Subject Matter

No claim is allowed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fiona T.

Art Unit: 1626

Powers whose telephone number is 571-272-0702. The examiner can normally be reached on Monday - Friday 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane can be reached on 571-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Fiona T. Powers/
Primary Examiner, Art Unit
1626

ftp October 19, 2009